

# Notice of Allowability

Application No.

10/802,926

Examiner

Eduardo Colon Santana

Applicant(s)

CHOI ET AL.

Art Unit

2837

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's after final amendment filed on 3/31/2006.
2. ☒ The allowed claim(s) is/are 1-16, 18-20 and 22-43.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20060410.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
MARLONT FLETCHER  
PRIMARY EXAMINER

**DETAILED ACTION**

1. Applicant's after-final amendment filed on 3/31/2006 has been received and entered in the case.
2. Applicant's amendment with respect to claim 43 has been fully considered and is persuasive.

**EXAMINER'S AMENDMENT**

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lisa A. Kilday on 4/19/2006.

4. The application has been amended as follows:

Rewrite claim 43.

43. (CURRENTLY AMENDED) A reaction apparatus, comprising:
  - a main body with a reaction chamber, and a sealing member disposed at an opening of the reaction chamber;
  - a lid, rotationally opening and closing the reaction chamber;
  - a lid rotation system that positions the lid approximately parallel to the sealing member, to ease creation of a vacuum in the reaction chamber;
  - a hinge bracket connected to the main body;
  - a main hinge rotatably connected to the hinge bracket;
  - a main hinge shaft, rotatably connecting the main hinge and the hinge bracket, and about which, the lid rotates;
  - an auxiliary hinge, rotatably connected to the main hinge, and connected to the lid;

a lifting member, rotatably connected at a first end thereof to the lid, at a point distanced from the main hinge shaft, and rotatably connected to the main body at a second end thereof;

a movable hinge accommodating part with a movable hinge hole therein;

a movable hinge shaft, inserted into the movable hinge hole, and connected to the first end of an inner member; and

a driver, driving the lid rotation system to automatically open and close the lid, and maintain closure of the lid during creation of a vacuum in the reaction chamber.

***Allowable Subject Matter***

5. Claims 1-16, 18-20 and 21-43 are allowed.

6. The following is an examiner's statement of reasons for allowance:

**CLAIMS 1, 24 and 43:** In view of the limitations, the prior art does not disclose alone or in combination a reaction apparatus or a lid rotation system for a reaction apparatus in which a main body having a reaction chamber includes a lid, which is rotationally opened and closed. The lid including a movable hinge accommodating part to the lid with a movable hinge hole and a movable hinge shaft inserted into the movable hinge hole and connected to a first end of an inner member of a lifting member and part of the lid rotation system. Furthermore, including a driver, driving the lifting member of the lid rotation system to automatically open and close the lid and maintain closure of the lid during creation of a vacuum in the reaction chamber.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 X.33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.



Eduardo Colon Santana  
Examiner  
Art Unit 2837

ECS  
April 19, 2006



MARLON T. FLETCHER  
PRIMARY EXAMINER